

Stat 305
Sprong 2021
Syllabus

1. The class is fully online.
 - Lectures will be asynchronous. They will be prerecorded and may be viewed (and reviewed) as you wish. The scheduled class hours (MWF 9:45 - 10:40 AM) will be used as office hours on Zoom. I will answer questions about class material, assist with homework, and work example problems. These will not be recorded.
 - Labs will be held by Zoom Mondays and Wednesdays from 6:30 - 7:50 PM Labs are not recorded. Labs teach the necessary computer skills for the class and offer assistance with homework. Labs are recorded, but of course you cannot ask questions unless you attend the live Zoom meeting.
2. Text: the text is *Introductory Statistics for the Life and Biomedical Sciences*. An electronic version is available free of charge at openintro.org. The website also includes labs which we will be using.
3. Instructor: E. Neely Atkinson
 - office: DH 2099
 - office hours: MWF 9:45 - 10:40 AM by Zoom
 - email: enatk@rice.edu
4. Course components.
 - Lectures. Please read the appropriate material from the text before watching the lectures. In lectures, I will expand on material from the text and cover material not included in the text.
 - Labs. Labs will be used to make sure you have the skills to work problems for homework and exams. Labbies will assist you with your homework and demonstrate how to use software to work problems. They will also answer questions about lecture material. Labs are conducted in Zoom. The labs will use material from the OpenIntro website.

- Office hours. MWF 1:30 - 2:25 PM by Zoom. I will answer questions about class material, assist with homework, and work example problems. These will not be recorded. This is a chance for more personal interaction.
- Homework assignments. There will be homework assignments for each chapter. The assignments will be posted in Canvas. Homework should be submitted electronically as a single file. The file may be in either Word, pdf or html format. The purpose of homework is to learn and practice the material covered in lectures and the text. You may use whatever resources you find helpful to work the assignments, including other students and the Web. However, you must turn in your own work. Submissions which are copies of another student's work will be considered a violation of the Honor Code.

Your lowest homework score will be dropped. Suppose there were only 3 assignments and they have possible scores 1, 5, 10. Suppose your scores are 0, 3, and 8. Convert these to 0/1, 3/5, and 8/10 or 0, 0.6, 0.8. The first assignment would be dropped and your average homework score would be $(0.6 + 0.8)/2 = 0.7$. Thus all homeworks have equal weight in the final score.

Show your work for homework. Do not just give the answer. If you use R to work the problem, show both your R commands and the output from R.

- Quizzes. There will be a quiz at the end of each Chapter. The purpose of the quizzes is to make sure you understand the basic concepts of each chapter. The lowest quiz will also be dropped, in the same fashion as the lowest homework.
 - Final. There will be a comprehensive final. It will be open book and open note.
5. Canvas. We will make extensive use of Canvas. All class material will be posted there. All homework will be submitted through Canvas. I will make important announcements using Canvas.
 6. Grading. Your final grade will be based on homework (1/3), quizzes (1/3), and the final (1/3).

I guarantee the following scale; thus, if you get an 84, your are guaranteed a B. I reserve the right to adjust the scale downward if I feel that a revised scale would better reflect my evaluation of the class

achievement. Suppose your final score for the class is s .

$98 \leq s \leq 100$	A+
$93 \leq s < 98$	A
$90 \leq s < 93$	A-
$87 \leq s < 90$	B+
$83 \leq s < 87$	B
$80 \leq s < 83$	B-
$77 \leq s < 80$	C+
$73 \leq s < 77$	C
$70 \leq s < 73$	C-
$67 \leq s < 70$	D+
$63 \leq s < 67$	D
$60 \leq s < 63$	D-
$s < 60$	F

7. Software. We will use the R programming language for this class. This software will be covered in labs and tutorials. No previous experience with programming in general or R in particular is required or expected.
8. Getting help. You are encouraged to ask questions both in office hours and during labs. I will respond to emails.
9. Course Outline. A spreadsheet is posted on Canvas showing for each week what is covered in lecture, what is covered in labs, and what homework and quizzes are due.
10. If you have a disability that requires accommodation, please contact both me and Disability Support Services in Allen Center. Possible accommodations include, but are not limited to, extra time for tests, special settings for tests, the services of a note taker, and permission to record lectures. Your request is confidential.
11. If you disagree with (or even have a question about) the grading of homework or an exam, you have one week from the time the work is returned to bring me your question. If I do not hear from you in one week, the grade is final.

Purposes of class. This course is meant to give you a solid grounding in the basic principles of statistical analysis. At the end of this course:

- You will understand the basic principles which underlie all statistical analyses.
- You be be able to perform a range of basic statistical analyses.
- You will be able to understand the ideas behind more advanced analyses, even if you do not completely understand all the details of the analyses or are not able to perform them yourself.
- You will be able to consult effectively with an expert statistician if the need arises in your work for the use of advanced techniques.